



# **Client Harmonization and possible obstacles**

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TF Compute Client Harmonization



# Outline

- Work plan
- EGI input
- Obstacles

# Work plan

- APIs for major programming languages
  - C/C++
  - Java
  - Python, possibly as wrapper around C/C++
- Single EMI-ES compute client vs. integration in existing clients

# Work plan (Java API)

- XML bindings
  - can be used in common with EMI-ES services implementation 
- Low-level client classes
  - automatically available from WS framework
  - already partially available
  - Factor out of services development 
- Higher-level client classes

# Work plan (Java API cont.)

- Handling of different job description languages
- Allow for reuse of existing job descriptions
  - OGF JSDL, Globus RSL, gLite JDL, UNICORE JSON
- At least map them to EMI-ES JDL, better even n:m or n:n mapping among them

# Work plan (C/C++)

- XML handling
  - Job submission
- WS framework
  - gSoap has “difficult” license
- Low-level client classes
- Higher-level client classes
- JDL handling

# Harmonization of existing clients

- Originally thought of aligning client options and arguments
  - dropped it
- Now EGI came up with the same/a similar issue

# Obstacles

- gSoap and openSSL licenses incompatible
  - <http://people.gnome.org/~markmc/openssl-and-the-gpl.html>
- Need alternative WS framework, if problem cannot be overcome
  - So far being ignored



# EMI-ES CLI

- Two options
  - Specific EMI-ES CLI
  - Integration of EMI-ES access in existing clients



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